COURSE: Prescribed Fire Planning and Implementation

TOPIC: Policy (Unit 1)

I. Objectives

- A. Describe policies that guide the use of prescribed fire in the Service.
- B. Describe policy safeguards to ensure that fire is safely applied to the landscape.

II. Introduction

- A. Fire can be a useful and powerful tool in the hands of managers if properly used. It can be used to manage wildland fuels or manipulate vegetation to meet refuge objectives.
- B. The objective of fire management in the National Wildlife Refuge System is to assist in the administration of a national network of lands and waters for the conservation, management, and where appropriate, restoration of the fish, wildlife, and plant resources and their habitats within the United States for the benefit of present and future generations of Americans.

C. Payoff

- 1. Obtain working knowledge of Service prescribed fire policies.
- 2. Enhance the safe use of fire within the Service Fire Management Program.

III. History/Accomplishments

- A. The use of fire as a management tool is not new to lands which are now National Wildlife Refuges. Prescribed burning has been conducted at St. Mark's NWR since 1927, before it formally became a refuge. This appears to be the oldest application of fire management in the Service.
- B. The Service has had outstanding prescribed burning programs and has been recognized by other agencies as pioneers in the application of scientifically derived burning plans for habitat management and wildlife protection.
- C. During the 1930's when other agencies stopped burning programs because of the commonly held notion that all fire was "bad," some refuges quietly continued very successful burning activities.

- D. During the period 1988-1997, the Service averaged 991 prescribed burns throughout the National Wildlife Refuge System totaling 322,092 acres. In 1999, the Service had 1,224 prescribed burns totaling 274,058 acres.
- E. Compared to the other Department of the Interior (DOI) agencies, the Service conducts more burns over twice the number of acres than the other agencies combined.
- F. Current year wildland and prescribed fire statistics can be accessed on the Internet at http://fire.r9.fws.gov/fm/stats/current/current.htm

IV. Federal Wildland Fire Management Policy

- A. Service fire management policy is based on the Departmental Manual (620 DM Chapters 1 and 2) and the Federal Wildland Fire Policy and Program Review.
- B. Firefighter and public safety is the first priority of the Fire Management Program. With the possible exception of instances where the life of another is threatened, no Service employee, contractor, or cooperator will be purposely exposed to life-threatening conditions or situations (See Service Manual 241 FW 7). All Fire Management Plans and activities must reflect this commitment.
- C. Only trained and qualified people will be assigned to fire management duties. Fire Management personnel will meet training and qualification standards established or adopted by the Service for the position they occupy. Agency Administrators will meet training standards established or adopted by the Service for the position they occupy.
- D. Fire, as a critical natural process, will be integrated into land, natural and cultural management plans and activities on a landscape scale, across bureau boundaries, and will be based upon best available science. All use of fire for natural and cultural resource management requires an approved plan which contains a formal prescription.
- E. The Service will employ prescribed fire whenever it is an appropriate tool for managing Service resources and to protect against unwanted wildland fire whenever it threatens human life, property and natural/cultural resources. Once people have been committed to an incident, these human resources become the highest value to be protected. If it becomes necessary to prioritize between property and natural/cultural resources, this is done based on relative values to be protected, commensurate with fire management costs.

- F. The National Wildfire Coordinating Group (NWCG) developed and approved an "umbrella" flowchart, which illustrates the broad framework encompassing policy implementation. The flowchart has become the cornerstone for policy description, illustration, and development of implementation processes. See Handout 1.
- G. Within the context of the new policy and terminology, there are now two "kinds" of fire, prescribed fire and wildland fire.
- H. Prescribed fire is defined as any fire ignited by management actions to meet specific objectives. A written and approved prescribed fire plan must exist, and NEPA requirements must be met, prior to ignition.
- I. All other fire (non-structure) is classified as wildland fire. For the purposes of this course, we will confine our discussions to prescribed fire.

V. Prescribed Fire Program

A. Overview

- 1. Fire is actively managed within the Service to achieve specific management objectives.
- 2. Fire is used as a tool to accomplish resource management objectives:
 - a. Enhancing wildlife and plant species and populations
 - b. Reducing hazardous fuels
 - c. Eliminating exotic/alien species
 - d. Promoting biological diversity
 - e. Preserving endangered species
 - f. Disposing of vegetative waste and debris

B. Definitions

1. Prescribed Fire

 a. Fire applied in a scientific way to fuels on a specific land area under selected weather conditions to accomplish predetermined, well-defined management objectives.

C. Goals

- 1. Conduct a vigorous prescribed fire program with the highest professional and technological standards.
- 2. Identify the type of prescribed fire that is most appropriate to specific situations and areas.
- 3. Efficiently accomplish management objectives through the application of prescribed fire.
- Continually evaluate the prescribed fire program to better meet program goals by refining prescription treatments and monitoring methods, and by integrating applicable technical and scientific advancements.

D. Prescribed Fire Plan Requirements

- 1. All refuges with vegetation that can sustain fire must have a Fire Management Plan.
- 2. DOI planning objective is "to prepare and implement comprehensive and coordinated fire management plans that are based on sound ecological principles, and which have been subject to full public participation and input."
- 3. Prescribed Fire Plans are legal documents, are a part of the refuges' Fire Management Plan, have been subjected to public participation and input, and therefore need to be realistic and followed.
- 4. No prescribed fire may be allowed to burn without suppression action unless a current and valid prescription has:
 - a. Been approved by a line officer,
 - b. Specific prescription elements listed in 621 FW 3.2 B.
 - (1) Prescribed burn objectives and how they support the land use objectives for the area.
 - (2) Expected fire behavior.
 - (3) Buffer and safety zones.

- (4) Perimeter length and acreage burned limit.
- (5) Analysis of the cumulative effects of weather and drought on fire behavior.
- (6) Potential impacts on visitors, users, and local communities, both on and off site.
- (7) Considerations of environmental, economic, and social effects, both on and off site, and
- (8) Items to include in the burn day assessment during the go-no-go determination.
 - a) Regional and national fire activity constraints, and
 - b) The maximum number of fires that can burn in the planning area at one time.
- 5. Prescribed fires in the refuge will be suppressed if they threaten:
 - a. Human life and safety,
 - b. Cultural resources or physical facilities of the refuge,
 - c. To have a negative impact on threatened or endangered species,
 - d. To escape from predetermined units or from the refuge, except where interagency agreements provide for certain fires to cross such boundaries, or
 - e. To exceed the prescription.
- 6. Prescribed Fire Reclassified as a Wildland Fire
 - a. If a prescribed fire is determined to be "out of prescription" further actions will be determined to achieve protection objectives through the Wildland Fire Situation Analysis (WFSA) process. The fire is now an unwanted wildland fire and will not be returned to prescription status.
 - b. All prescribed fires that are reclassified will be reviewed by the refuge manager or his/her designated representative.

- 1) The purpose is to determine why and under what circumstances the prescribed fire had to be reclassified.
- 2) A formal report will be made on all prescribed fires that are reclassified.

E. Qualifications/Training Requirements

1. Prescribed Fires

a. Physical Fitness

- 1) Personnel not physically qualified will not be used on prescribed fire operations.
- Employees participating in prescribed fire activities on refuges are required to attain a "Moderate" physical fitness rating as defined in the PMS 310-1 Wildland and Prescribed Fire Qualification System Guide and the Fire Management Handbook.
- 3) Exceptions to this standard are necessary when a refuge analysis of prescribed fire operations reveals that terrain, tactics, and fuels present require physical fitness standards more restrictive than a "Moderate" standard for specific prescribed fire projects. Refuge personnel will meet the highest physical fitness category required to safely conduct prescribed fire operations on the refuge, determined by terrain, tactics and fuels.

b. Training

- 1) All personnel are required to have completed Basic Firefighter Training (S-130) and Introduction to Fire Behavior (S-190) prior to their participation in on-line prescribed fire activities.
 - a) Standards for Survival must be included as part of S-130/S-190 or provided by a separate training session. (10 Standard Orders; 18 Watchout Situations).

2. Interagency Prescribed Fires

All Service personnel performing interagency prescribed fire assignments must meet training and experience requirements as established by NWCG.

Physical fitness standards are set by each agency and will be accepted by participating agencies.

- 3. Burn Boss Type 3 (RXB3)
 - a. This position was established to meet the refuge prescribed fire workload, which does not require the level of qualification of interagency standards for Burn Boss Type 1 or 2.
 - b. Certification requirements include S130, S190, S290, S390 and this course. In addition, the Burn Boss must have prior experience in the fuel model in which he/she is conducting the prescribed fire. A Burn Boss Type 3 Task Book, similar to the one used for Interagency Operations, will document qualifications for the RXB3 position.
 - 1. Other federal wildland fire agencies have adopted the FWS Burn Boss Type 3 concept. This may become an NWCG position within the next few years if all the wildland agencies agree on the same qualifications for the position.
 - 2. The RXB3 will only conduct prescribed burns deemed as:
 - (1) Low risk of escape
 - (2) No negative impacts if minor escapes occur
 - (3) Require low to moderate burning conditions
 - (4) Do not involve aerial ignition or aerial operations
 - (5) Do not involve multiple fuel complexes or fuels do not exhibit extreme fire behavior characteristics (such as California chaparral)
 - (6) Have simple burn objectives.
 - (7) The burns are usually conducted by a crew of 2-6 personnel with someone in charge.

6. Review of Prescribed Fire Burn Plans

All prescribed fire plans should ideally be prepared and developed by an interdisciplinary team in which at a minimum, at least one member has successfully completed the FWS Prescribed Fire Planning and Implementation (PFPI) or the NWCG Prescribed Fire Burn Boss (RX-300) training course or earlier version.

Regional review and concurrence processes must be established to insure competent, technical reviews take place for burn plans. All new or previously developed prescribed fire plans should be subject to the established regional review process during the scheduled year of implementation including a new signature page for previously developed plans.

The prescribed fire plan review should be based on the prescribed fire complexity analysis, and at a minimum:

- 1. Low or moderate complexity prescribed fire burn plans should be reviewed by a NWCG Prescribed Fire Burn Boss Type 2.
- 2. High complexity prescribed fire burn plans should be reviewed by a NWCG Prescribed Fire Burn Boss Type 1.
- 3. For prescribed fires involving aviation operations, the appropriate NWCG Prescribed Fire Burn Boss reviewing the plan should also have prescribed fire operational aviation experience.

If the prescribed fire plan **was not** developed by a currently qualified NWCG Prescribed Fire Burn Boss at the appropriate type, the technical review has to be by a **currently qualified** NWCG Prescribed Fire Burn Boss at the appropriate type. If the prescribed fire plan **was** developed by a currently qualified NWCG Prescribed Fire Burn Boss at the appropriate type, then the technical review can be by a **previously qualified** NWCG Prescribed Fire Burn Boss at the appropriate type.

VII. Summary

- A. Fire is actively managed within the Service to achieve specific management objectives.
- B. Firefighter and public safety is the first priority of the fire management program. With the possible exception of instances where the life of another is threatened, no Service employee, contractor, or cooperator will be purposely exposed to life threatening situations or conditions.

- C. It is Service policy that "No prescribed fire may be allowed to burn without an appropriate management response unless a current and valid prescription has been approved by the responsible line officer."
- D. Only trained and qualified personnel will be assigned to prescribed fire duties.
- E. Prescribed burn plans must be developed by qualified individuals, and there must be adequate technical review of these plans before they are implemented.